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Annual Index — 1997

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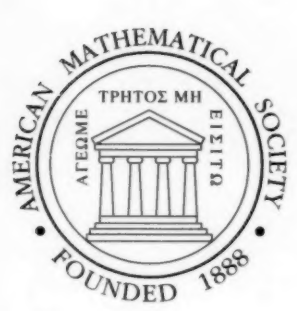
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PREFACE

This annual index of Mathematical Reviews (MR) is included with each subscription and is also available separately. It is also called Volume 29 of the Index of Mathematical Papers (IMP). Volumes 6–9 of IMP are the annual indexes of MR for the years 1974–77 and are available as a set. The 1978 annual index was the first to be included with each subscription. There are cumulative author indexes to MR that cover 1940–59 (Vols. 1–20), 1960–64 (Vols. 21–28) and 1965–72 (Vols. 29–44), subject indexes for 1940–58 (Vols. 1–19) and 1959–72 (Vols. 20–44), and author and subject indexes for 1973–79 (Vols. 45–58) and 1980–84.

The classification scheme used in the present index is the 1991 Mathematics Subject Classification (MSC). A copy of the 1991 MSC is printed in the back of the subject portion of this index.

The entries in the author, key and subject indexes are comprised of all items reviewed in MR during a given year and some items which will not be reviewed by MR but which have appeared in Current Mathematical Publications (CMP). A star (★) preceding a title indicates a book or other item that is reviewed as a whole. The symbol Ⓥ preceding a title indicates that the item is a videocassette.

Author index; separate key index

The entries in the author and key indexes give full bibliographic information. These entries are accompanied by review numbers {if available} and classification numbers; secondary classification numbers are given in parentheses. Entries are listed alphabetically by author; entries having several authors are listed in full under each author. Surnames consisting of more than one part (e.g., del Olmo, van der Mee) are listed under the first capital letter. Collections of papers, proceedings, bibliographies, tables, etc. that are edited rather than authored are listed in the key index by title and by "key entry". For example, the publication entitled *Categorical topology* is listed under **Categorical topology** and is also listed under **Conference: Categorical Topology** and under the location of the conference. Some monographic series (e.g., American Mathematical Society Translations, Series 2) have entries under the series title in this index.

Arrangement of entries in the author and key indexes

For a given heading (i.e., the primary name of an author, or a title), full entries are listed in order of nominal publication dates; the cross-references are in MR number order after the full entries. The arrangement of each entry is the same as in the heading of its review in MR. The general form for entries is as follows:

Books, Monographs. (Coauthors {if necessary}) ★Title. (Language of original {if necessary}. Summary languages {if necessary}) [English translation of title {if necessary}] Miscellaneous information {edition, editors, translators, series, etc.}. Publisher, city, date. Pagination. ISBN. (Reviewer's name) Review number {if available} Primary classification (Secondary classifications {if necessary}).

Journal article. (Coauthors {if necessary}) Title of article {in English translation if the original title is not in English, French or German}. (Language of original {if necessary}. Summary languages {if necessary}) [English translation of title {if necessary}] Journal abbreviation {including series number if necessary} Volume number(volume number in first series {if given}) (nominal date), issue number {if necessary}, pagination (imprint date). (Reviewer's name) Review number {if available} Primary classification (Secondary classifications {if necessary}).

The first three digits of the review number of an item refer to the MR issue in which the review is published and the last five digits refer to its position within that issue. The first two digits after the colon are the general subject classification of the item.

The phrase "EA 97m" after an MR number indicates that an MR erratum or addendum to the review appears at the end of the 97m issue.

Subject index

The entries in the subject index are arranged in classification order. For a given classification, all entries with that classification as a primary appear first, with authored entries appearing before unauthored entries. These are followed by entries with that classification as a secondary. Again, authored entries appear before unauthored entries. Each section under a given classification is arranged in alphabetical order. For each entry, the author(s), title, language, translated title {if necessary} and the review number {if available} appear at the first author only. The entries for subsequent authors are cross-references to the first author. Complete bibliographic information is available in the annual author and key indexes as well as in the MR review.

Cross-references

There are four kinds of cross-references in these indexes:

Name variations. An author's preferred name is the variation of the name that MR has chosen on the basis of frequency and currency of usage. Items by a given author are usually listed under the author's preferred name. In the author index, cross-references to the preferred form are given from sufficiently distinct alternative forms of the author's name.

Authors in other capacities. In the author index, the names of persons associated with an item in a capacity other than that of author (e.g., editor, translator, subject of a biography, etc.) are also listed. In the subject index, such names appear in parentheses. In both indexes these items occur only as cross-references to complete listings.

Key entries. Cross-references for such entries as bibliographies, obituaries and references to special events are made to the authors of the papers in which these items appear, e.g. **Bibliography: Newman, Morris** *see* **Goldberg, Moshe, 97k:01031**.

Unreviewed entries. Some entries in these indexes have not been reviewed in MR (e.g., items that do not appear to be in final form, or that are at the fringes of MR's scope) although they have been listed in CMP. Unreviewed items appear in the author, key and subject indexes in a format similar to that of reviewed items. For unreviewed items that are part of a collection, the review number in parentheses is a cross-reference to the table-of-contents review, i.e. (see 97x:xxxxx) or (97x:xxxxx). For unreviewed items that are not part of a collection, there is no review number cross-reference.

Transliteration

Since 1983, MR has used the Cyrillic transliteration in use by ANSI, LC, Zbl, ISI, and others. This is also the system used throughout this index. A Cyrillic transliteration table appears at the end of the author/key index.

Names of Chinese authors

The name of a Chinese author appears in the index in Western form. For example, Chen Hong Bin will be listed as Chen, Hong Bin, as though the author's name were Hong Bin Chen. The pinyin transliteration is used for mainland Chinese authors and the Wade-Giles transliteration is used for Taiwanese authors.

In an undertaking of this size, errors are inevitable, despite elaborate precautions and checks. The editors of Mathematical Reviews would be very glad to have their attention drawn to errors in this index and also in the earlier indexes.

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Aaboe, A. (*with* Berggren, J. L.) Didactical and other remarks on some theorems of Archimedes and infinitesimals. *Centaurus* **38** (1996), *no.* 4, 295–316. (A. G. Molland) **97m:01011** 01A20 (00A35)

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Aarão Reis, Fábio D. A. Diffusion on regular random fractals. (English summary) *J. Phys. A* **29** (1996), *no.* 24, 7803–7810. 82B44 (82–04)

— Scaling for random walks on Sierpinski carpets. (English summary) *Phys. Lett. A* **214** (1996), *no.* 5-6, 239–242. (Summary) **97c:82026** 82B41 (60J15)

Aaronson, Jonathan (*with* Hamachi, Toshihiro; Schmidt, Klaus) Associated actions and uniqueness of cocycles. (English summary) *Algorithms, fractals, and dynamics (Okayama/Kyoto, 1992)*, 1–25, *Plenum, New York*, 1995. (S. I. Bezuglyĭ) **97j:28033** 28D05

— (*with* Weiss, Benjamin) A $\mathbf{Z}^d$ ergodic theorem with large normalising constants. (English summary) *Convergence in ergodic theory and probability (Columbus, OH, 1993)*, 1–13, *Ohio State Univ. Math. Res. Inst. Publ., 5, de Gruyter, Berlin*, 1996. (Thomas Ward) **97h:28008** 28D15 (60F15)

— (*with* Burton, Robert M., Jr.; Dehling, Herold; Gilat, David; Hill, Theodore Preston; Weiss, Benjamin) Strong laws for L- and U-statistics. (English summary) *Trans. Amer. Math. Soc.* **348** (1996), *no.* 7, 2845–2866. (Manfred Denker) **97b:60047** 60F15 (28D05, 62G30)

Aarseth, Sverre J. (*with* Mikkola, Seppo) A slow-down treatment for close binaries. (English summary) *Celestial Mech. Dynam. Astronom.* **64** (1996), *no.* 3, 197–208. (Summary) **97g:70004** 70–08 (70F10)

Aarts, E. H. L. (*with* Verhaegh, Wim F. J.) A polynomial-time algorithm for knapsack with divisible item sizes. (English summary) *Inform. Process. Lett.* **62** (1997), *no.* 4, 217–221. (Summary) **97m:68105** 68Q25

Aarts, Erik Complexity of Horn programs. (English summary) *Logic program synthesis and transformation (Utrecht, 1995)*, 76–90, *Lecture Notes in Comput. Sci.*, 1048, *Springer, Berlin*, 1996. (*see* **97m:68005**) 68N17 (68Q25)

Aarts, Jan M. (*with* Pol, Roman) A closure property for normal families of spaces. (English summary) *Bull. Polish Acad. Sci. Math.* **40** (1992), *no.* 4, 293–296. (Valentin Gutev) **97d:54057** 54F45

— Chaos and fractals—an example. (Dutch. Dutch summary) *Summer course 1996: chaos (Dutch)*, 93–108, *CWI Syllabi*, 41, *Math. Centrum, Centrum Wisk. Inform., Amsterdam*, 1996. (Summary) **97e:58196** 58F23 (28A80, 58F13)

Aasaraai, A. (*with* Mehri, B.) On the existence of periodic solutions for certain non-linear second order O.D.E. (English and Persian summaries) *Bull. Iranian Math. Soc.* **21** (1995), *no.* 2, 59–65. (From the summary) **97j:34051** 34C25

Aase, Knut K. A model for loss of profits insurance. (English summary) *Stochastic analysis and related topics, V (Silivri, 1994)*, 99–110, *Progr. Probab.*, 38, *Birkhäuser Boston, Boston, MA*, 1996. (Summary) **97a:62221** 62P05

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Aassila, Mohammed Decay estimates for a strongly damped nonlinear wave equation. (English summary) *C. R. Math. Rep. Acad. Sci. Canada* **18** (1996), *no.* 6, 269–272. (Summary) **97m:35173** 35L70 (35B40)

— Nouvelle approche à la stabilisation forte des systèmes distribués. (English and French summaries) [A new approach to the strong stabilization of distributed systems] *C. R. Acad. Sci. Paris Sér. I Math.* **324** (1997), *no.* 1, 43–48. (Summary) **97i:93081** 93D15 (35B37, 35L70, 93C20)

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shafei deh Abad, A. *see* **Shafei Deh Abad, A.**

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Abad, J. (*with* Rios, Miguel) Bethe ansatz equations for quantum chains combining different representations of SU(3). (English summary) *J. Phys. A* **29** (1996), *no.* 21, L533–L538. (Summary) **97i:82033** 82B23 (82B20)

Abad, Manuel (*with* Diaz Varela, J. Patricio) Free algebras in some subvarieties of Ockham algebras. (English summary) *Proceedings of the Third "Dr. Antonio A. R. Monteiro" Congress on Mathematics (Spanish) (Bahia Blanca, 1995)*, 13–25, *Univ. Nac. del Sur, Bahia Blanca*, 1996. (T. S. Blyth) **97g:06015** 06D30 (08B20)

— (*with* Monteiro, Luiz F.; Savini, S.; Sewald, J.) Free monadic Tarski algebras. (English summary) *Algebra Universalis* **37** (1997), *no.* 1, 106–118. (S. Rudeanu) **97k:03071** 03G10 (03G05)

Abad, Prakash L. (*with* Cho, Danny I.; Parlar, Mahmut) A Markov decision process approach to repairable-item inventory problem. (English summary) *Probability models and statistics*, 181–198, *New Age, New Delhi*, 1996. (Summary) **97j:90030** 90B05 (90C40)

cao-Abad, R. *see* **Cao-Abad, R.**

Abadi, Martin (*with* Cardelli, Luca) A theory of primitive objects. Second-order systems. (English summary) ESOP '94 (Edinburgh, 1994). *Sci. Comput. Programming* **25** (1995), *no.* 2-3, 81–116. (Editors) **97b:68120** 68Q55 (03B70, 68N05)

— (*with* Cardelli, Luca) A theory of primitive objects: untyped and first-order systems. (English summary) Theoretical aspects of computer software (Sendai, 1994). *Inform. and Comput.* **125** (1996), *no.* 2, 78–102. (Eugenio Moggi) **97f:68106** 68Q55 (03B70, 68N15)

Abadir, Karim M. The limiting distribution of the t ratio under a unit root. (English summary) *Econometric Theory* **11** (1995), *no.* 4, 775–793. (Yoshihiro Yajima) **97c:62207** 62M10

— The joint density of two functionals of Brownian motion. (English summary) *Math. Methods Statist.* **4** (1995), *no.* 4, 449–462. (Summary) **97c:60200a** 60J65 (62M10)

— (*with* Larsson, Rolf) The joint moment generating function of quadratic forms in multivariate autoregressive series. (English summary) *Econometric Theory* **12** (1996), *no.* 4, 682–704. (Sung K. Ahn) **97k:62184** 62M10 (62P20)

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